

NUCLEAR DIVISION NEWS

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 5 - No. 19

October 3, 1974



PADUCAH PLANT SAFETY HONORS — Union Carbide Corporation's Distinguished Safety Performance award is presented the Paducah Gaseous Diffusion Plant for outstanding on-the-job safety. The plaque is presented by Roger F. Hibbs, right, President of the Nuclear Division, to Clyde C. Hopkins, Plant Manager. Seated is William S. Sneath, President of Union Carbide Corporation.



AEC AWARD — Robert J. Hart, left, presents Jack M. Case, Plant Manager at Y-12, the Commission's award of merit, as the Y-12 Plant continues daily to break its own safety record, as well as set new Union Carbide Corporation records.

NUCLEAR DIVISION SAFETY SCOREBOARD

14.835.000 Man-Hours

AWARD OF MERIT — Robert J. Hart, left, Manager of the Oak Ridge Operations of the Atomic Energy Commission, awards the Oak Ridge National Laboratory the Commission's award of merit. Accepting the plaque, is John A. auxier, right, Director of ORNL's Health Physics Division. ORNL earned the merit award for 2,327,000 man-hours worked without a lost-time acceident.

Nuclear Division's safety performance earns plaudits

The Nuclear Division gleaned a total of six major safety honors in ceremonies at the Paducah Gaseous Diffusion Plant.

The Y-12 Plant, which still continues to break its own, as well as all Union Carbide Corporation, records copped a total of three major awards, one each from UCC, the Atomic Energy Commission and the National Safety Council.

Two awards at Paducah

The Paducah Plant picked up awards from the AEC and the NSC, and Oak Ridge National Laboratory was awarded the AEC's award of merit.

Y-12's honors were UCC's distinguished safety performance award; the NSC's award of honor; and the AEC's award of merit. All were earned for the 4,972,000 man-hours worked without a lost-time accident from January 18 through June 3, 1973. Jack M. Case, Plant Manager, received the awards for the plant.

Award of merit

The Paducah Plant was awarded the NSC's award of merit and the UCC distinguished safety performance award for the accident-free period of 3,200,000 man-hours worked from October 9, 1972 through February 13, 1974 . . . the first time the plant had

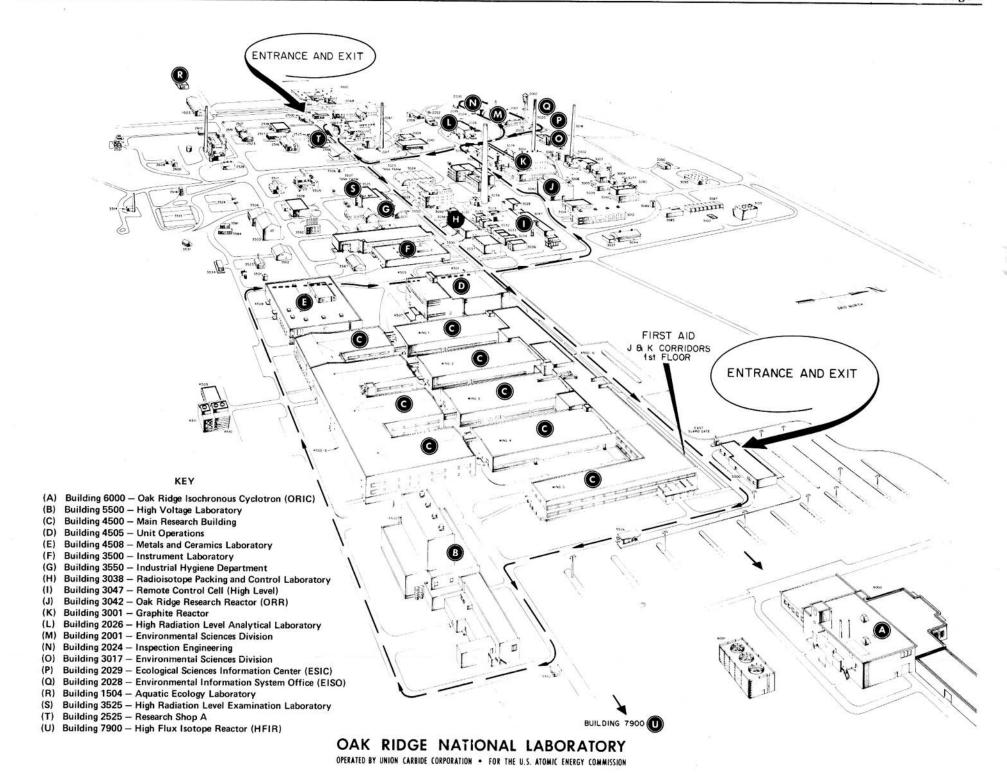
worked a full year without a lost-time accident.

ORNL's award of merit from the AEC went for the 2,327,000 manhours worked without a lost-time injury from December 12, 1972 to April 25, 1973.

Present for the awards were William S. Sneath, President of UCC; Roger F. Hibbs, President of the Nuclear Division; John A. Auxier, representing ORNL management; Robert J. Hart, Manager of the Oak ridge Operations of the AEC; Clyde C. Hopkins, Plant Manager at Paducah; Case and other Company officials.

IN THIS ISSUE

ORNL sets open house page 2
Physician's Associate joins staff
Question Boxpage 5
United Way agency page 7
ORGDP promotions page 8



ORNL family day program planned for October 13

More than 5,000 people attended a special "Family Day" program at Oak Ridge National Laboratory last year, the first to be held since 1967.

Another family day is planned for Sunday, October 13, from 10 a.m. to 5 p.m. for the benefit of those who were unable to attend last year, and for the 800-plus new employees who are now working at ORNL.

The purpose of family day is to give employees an opportunity to show their families the various facilities at the Laboratory. All employees of the Nuclear Division, as well as employees of the local AEC, UT Comparative Animal Research Laboratory, ORAU and Rust Engineering, are invited to attend

A committee consisting of representatives from all participating divisions has formulated plans for this event. Included will be guided tours, demonstrations, displays and exhibits depicting the various scientific activities conducted at ORNL.

Herman Postma, ORNL Director, and his staff will be on hand from 1 to 3 p.m. to greet employees and their guests. Personnel from each participating division will also be present

to answer questions and explain their activities

Only ORNL facilities at the X-10 site will be included in the October 13 family day. Employees must accompany their guests and will be held responsible for anyone they bring in. (An employee may bring only members of his or her family.) Admittance to the area will be gained through use of employee badges. Both the East and West Portals will be open and visitors may enter or leave the Laboratory from either.

Some of the special attractions to be featured are:

• Mobile displays of energy sources

- and programs at ORNL
 Model of an adult human used in
- radiation exposure experiments
- Demonstrations of equipment used in report processing, drawing illustrations and reproducing reports
- Tours of the Information Center Complex
- Displays of equipment used in analytical chemistry, including the

electron microscope, smoking machines and mechanical hands

- Demonstration (audience may participate) using computers in nuclear physics
- Display of an operating thermoelectric generator using radioisotopes (made at ORNL) as a power source
- Displays depicting types of environmental research conducted at ORNI
- Tour of the Aquatic Ecology Laboratory
- Demonstrations of electronic cell counting system and treadmill exercise testing procedures
- Computer games
- Free blood pressure check
- Demonstration of a miniature fast analyzer of body fluids used to determine irregularities in certain systems of the human body

A map of the facilities to be featured is shown above.

Savings Plan-Personal Investment Account Recent unit values:

	Fixed Income Fund	UCC Stock	Equity Investment Fund
May 74	\$10.57	\$41.04	\$7.99
June 74	10.64	41.84	7.73
July 74	10.70	. 39.85	7.03
August 74	10.77	42.00	6.26

Note: Fixed Income Fund unit values reflect interest additions to achieve the guaranteed effective annual interest rate of 7-34% for 1974. Union Carbide stock values are the average cost of stock purchases during the month plus brokerage charges. Equity Investment Fund unit values represent the month-end market value of securities held by the Fund. Dividing the total value by the number of units in the fund establishes the month's unit value - and the price at which new units are added that month.

THE LAST WORD

It would certainly be nice to be as sure of anything as some people are of everything.

Division Deaths

Rella O. Davis, building services in the Y-12 Plant, died September 12 at a Knoxville hospital. A native of LaFollette, she had been with Union Carbide more than 30 years.



Mrs. Davis

The Davis home is at 315 North Street, LaFollette. She is survived by a daughter, Laura Jarnagan; a son, James D. Davis Jr.; sisters, Molly Elsie Shephard, Lowery, Hazel Pore and Marguarite Wither-

spoon; brothers, Willie, Andy, Don, Arthur and Edward Osborne; and two grandchildren.

Funeral services were held at the Cross Chapel with the Rev. David Stidham officiating. Burial was in the Long Hollow Cemetery.

Elmer Lamb, a 22-year veteran in M Wing in Y-12, died September 12 at his Back Valley Road, LaFollette,



Mr. Lamb

He is survived by his wife, Ruth Summer Lamb; daughters, Mrs. Ernest Ivey, Mrs. lames Queener a n d Mrs. Woodrow Wilburn; a son, Elmer Lamb Jr.; sisters Edna Garland, Della Hunley, Violet Ayers, Cleo Lamb and

Jean Parker; brothers, Earl and Orville Lamb; and 10 grandchildren.

Funeral services were held at the Cedar Hill Baptist Church with the Rev. Owen Hatmaker and the Rev. Lester Anderson officiating. Burial followed in the Campbell Memorial Gardens.

General James Ellis, an illustrator in the Information Division at ORNL, died September 15 in a Knoxville Hospital.

Mr. Ellis, an army veteran, first came to work at ORNL in 1965. He was employed in Florida for two years, and returned to ORNL about three years ago.



Mr. Ellis

Mr. Ellis is survived by his wife, Mrs. Carole Bayless Ellis; two sons, James Montgomery and Martin Jeffrey Ellis; a daughter, Jamie Melynda Ellis; father, Joe G. Ellis; and a brother, Bob Ellis.

The Ellis home is at 7701 Maida Vale Circle, Powell.

Graveside services were held in Highland Memorial Cemetery, with the Reverends Charles Sharits and William Keebler officiating.

Next Issue

The next issue will be dated October 17. The deadline is October



Natalie Tarr

HPS meritorious award goes to Natalie Tarr

Natalie E. Tarr, ORNL's Information Division, was recently named a recipient of the Health Physics Society's "Meritorious Performance Award." Miss Tarr is one of two people to receive the award which was initiated this year.

Miss Tarr was cited for her "long, faithful, capable and cheerful service" to the Society as secretary to one of its past-presidents and through continuous work with its educational and editorial programs.

A graduate of the University of Maine, Miss Tarr came to work at ORNL in 1958 as secretary to the late Elda E. Anderson in the education and training section of the Health Physics Division. She began her work with the HPS when Dr. Anderson became president in 1959.

Miss Tarr has served in various capacities with the HPS including editorial secretary of the Health Physics Journal and chairman of the History Committee. She has coauthored two papers which will be published or presented later this year: "Origins of the Health Physics Society" and "Past, Present and Future Training of Health Physicists in the United States."

Miss Tarr is currently a technical reports assistant in the Technical Publications Department.

Philip P. Williams, an engineer in the Instrumentation and Controls Division at ORNL, died September 13.

Mr. Williams had worked at ORNL for over 28 years and was a member of the Instrument Society of America.



Survivors clude his wife, Mrs. Beatrice C. Williams, Route 1, Andersonville; son, Richard P.; daughters, Mrs Combs Georgia and Cathy Jean Williams; brother, Joseph S.; sisters,

Mr. Williams Mrs. Sarah Loew, Mrs. Martha Stump, Mrs. Ellen Norton, Mrs. Mary Hansen and Mrs. Nan-

cy Pyree. Funeral services were held September 15 at Holley-Gamble Chapel, with the Rev. Frank Meredith officiating. Interment followed at the Tennessee Valley Memory Gardens.

Y-12 Maintenance Division ups four additional foremen

Four additional foremen have been named in Y-12's Maintenance Division, according to J. W. "Bill" Ebert, division superintendent. They are: Lendon E. Hart, Carl Pelfrey Jr., Norman E. Morgan and Clyde J. Price.

Hart, a native of Rockingham, N.C., has been at Y-12 almost 25 years. He is a graduate of the Tennessee Institute of Electronics and the Telephone and Telegraph School. Before joining Union Carbide, he was in business for himself and worked with the Home Beneficial Insurance Company.

He is married to the former Naomi Thomason, who also works in Y-12, and they have three children, Lendon M., Patricia Scott, and Nancy. They live at Route 2, Oliver Springs.

Pelfrey is a native of Rockwood and attended school there. He has been at Y-12 six years. Prior to that, he worked as a pipefitter with the Atlas Chemical Company.

He has four children, Teresa Holmes, Jeffrey, Richard and Heath. They live at 220 South Patten Avenue, Rockwood.

Morgan was born in Oliver Springs, and still lives there on Route 1. He has been at Y-12 27 years, and served



The ORNL Credit Union will hold an informal information meeting for its members on October 16 at 6:30 p.m. at the Oak Ridge Civic Center. The meeting will provide an opportunity for members to ask questions and participate in discussion groups. Specialized topics will be presented in a series of poster displays.

The meeting will be held during International Credit Union Week. A. J. "Rusty" Girdner, managing director of Tennessee Credit Union League, will give the keynote address. All Credit Union members are urged to attend.





in the U.S. Army before his Union Carbide employment.

Mrs. Morgan is the former Mary Griffith.

Price, a native of Sevierville, attended the Carpenter Apprentice Trade School, and The University of Tennessee.

He joined Union Carbide 23 years ago, after serving in the Armed Forces and working with Alcoa.

He lives at Route 17, Laurel Road, Knoxville, with his wife, the former Ida Mills. They have five children, Donna Brasfield, Joe, Becky, Jackie and Jamie.

I desire to see in this country the decent men strong and the strong men decent, and until we get that combination in pretty good shape, we are not going to be by any means as successful as we should be ... Theodore Roosevelt,



BOND DRAWING - The Oak Ridge Gaseous Diffusion Plant recently awarded savings bonds to 145 employees in the Plant's first drawing since the new incentive program was initiated. From left, J.K. Lowery, who was one of the \$500 bond winners; Patsy Evans, one of the \$25 winners; Plant Manager Robert A. Winkel who awarded the bonds; Mary C. Denton, representing the \$50 bond winners; and D.W. Brannon, who won a \$200 bond.



Y-12 PLANT 30 YEARS

James W. Fox and James A. Morgan, utilities administration; Robert L. Martin, building, grounds and maintenance shops; Thomas R. Webber, machine maintenance; and Hubert B. Harlan, assembly engineering.

25 YEARS

Johnson Robinson.

20 YEARS

Thomas W. Osborne Jr., Charles Pitts Jr., Raymond G. Hurst, Claude Rittenberry, Archie D. McPeters, Glynn F. Beck, Keith C. Parsons, Walter R. Hensley and George E. Byrd.

ORGDP 30 YEARS

Raymond R. Tippy, administrative services; Martin Franklin Jr., chemical operations administration; Hillery Jones, guard department; John T. Nenon, U-235 separation department; Giles D. Oldham, machine shop department; Conley Lov and John C. Keylon, maintenance automotive equipment department; Neal H. Hurd, instrument fabrication department; Jessie S. Howard, traffic, receiving and shipping; Walter S. Wendolkowski, fabrication development; Claude E. Jones and William H. Bullins, Oak Ridge area electricity distribution; Trehwhett Hope, operations planning; J. Roy Quarles, maintenance division administration; Charles Sills, chemical operations administration; Bruce J. Stepp, maintenance heavy equipment department; Ernest Edwards, U-235 separation department; Alvin Hilton, SS material handling - U-235 separation department; Clyde Hill, machine shop department; Elmer C. Gaines Jr., SS material handling -U-235 separation department; Seth Tallent, building maintenance department; Kenneth N. Moore, development maintenance; Harry L. Belcher, cascade maintenance department; James H. Allen, grounds maintenance department; Earl Roberts, chemical operations department; Flora M. Lewis, central reproduction services; Charles H. McIntyre, cascade coordinators; and John H. Anderson, fabrication shop department.

25 YEARS

Jewell G. Hayes.

20 YEARS

Charles G. Henley, Benny S. Houser, Samuel O. McClure and Thomas A. Turley.

GENERAL STAFF 30 YEARS

Frances N. Russell, Purchasing Division.

ORNL 20 YEARS

Wesley D. Arnold Jr., Kenneth J. Northcutt, Walter D. Hoyle, Anthony L. Bacarella, Thomas A. Carlson, William A. Bush and James C. Bresee.

James H. Mason Jr., Robert B. Whitaker, Martha D. Eden, John A. Russell Jr., Earl E. Chambers and James D. Wolfenbarger.

Nuclear Division hires its first 'physician's associate at ORNL

Edmund J. Wise Jr., a native of Brentwood, Pa., is the first "physician's associate" to be hired in the Nuclear Division. Wise joined the staff of ORNL's Health Division on August 15.

A physician's associate, according to Wise, "is an individual with capabilities in the field of medicine who performs his services under the direct supervision of a physician."

Wise graduated from Washington-Jefferson College with a B.A. degree in biology and premedical sciences. Following graduation he entered the U. S. Army to fulfill his ROTC commitment. He was assigned as a medical service corps officer and served in several administrative capacities. He also received training in medical procedures.

Duke University program

Upon completion of his Army commitment, Wise heard about the physician's associate program offered at Duke University from a friend who was in training there. He went to Duke and worked as a technician for Dr. Edward S. Orgain, a cardiologist. During his year with Dr. Orgain, he was accepted into the P.A. program.

Duke University pioneered the establishment of the P.A. program. Two doctors there, Stead and Estes, recognized the need for an intermediary level of medicine between the nurse and the physician. There were many people, especially U.S. servicemen, who had received some medical training and practice, and wanted to get into the medical profession but did not, necessarily, want to become doctors or nurses. So the P.A. program was initiated at Duke in 1965 to retrain these people to become a productive work force from which physicians might draw.

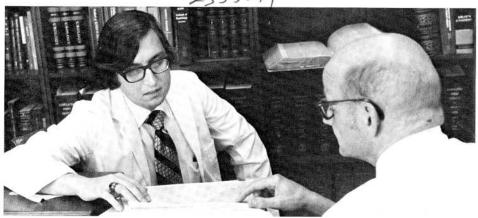
Basic concept

There were several forerunner programs initiated by other institutions whose basic concept was to train people in a particular area of medicine, in many cases to even work with a particular physician. The program at Duke is based on the concept of giving the P.A. a broad base of knowledge so he will be flexible enough to do many things in different areas of medicine.

About 40 educational institutions now have programs similar to the one at Duke.

The P.A. program involves two years of extensive training. Prerequisites for acceptance into the program include a minimum of two years of college and 2,000 hours of clinical experience in medicine. The experience may have been gained in any of the diverse areas of medicine, including laboratory technician, nurses, and military practice.

Although the minimum requirement is two years of college, most applicants have completed four years and some even have M.S. and Ph.D. degrees. Competition for admission is fairly strong. Out of the approximately 2,000 applications that are received at Duke each year, only 44



PHYSICIAN'S ASSOCIATE AT ORNL — Edmund Wise, P.A., consults with Dr. Thomas Lincoln, director of ORNL's Health Division. Wise is the first physician's associate to be hired in the Nuclear Division.

students are accepted into the program.

Three phases

There are three basic phases involved in the P.A. program: the academic phase which takes about nine months; the clinical phase which involves six eight-week rotations; and the 10-week preceptorship.

Wise described the first phase as "pure academia." Students spend 40 hours a week in the classroom, four hours a night working with patients in hospital wards, and the rest of the time preparing for the frequent examinations which are given.

The clinical phase involves working in a variety of medical services with patients. Certain rotations, such as surgical outpatient clinic and the medical inpatient clinic, are required. Others may be selected by the students according to their area of interest.

Wise's area of interest is general medicine. Some of the rotations which he took were general surgery, infectious disease, cardiology and respiratory care.

The 10-week preceptorship is comparable to a short internship. The P.A. leaves the University and goes to work for a prospective employer.

Emphasis on clinical medicine

Major emphasis of the program is on clinical medicine. Wise's final examination for that area was extensive, with part practical, part written, part "working up" a patient and part interpreting x-rays, slides, lab work, etc.

On completion of the P.A. program, Wise received the bachelors of health science degree and was registered by Duke University as a physician's associate. In December he plans to take board examinations to receive a certificate, comparable to a license, from the National Board of Medical Examiners.

The physician's associate is not designed to be an independent profession. "The role of the P.A. is not to compete with the physician, but to augment him by taking over some of the minor procedures and responsibilities, thus freeing him to do more important things," said Wise. With the current shortage of doctors, especially ones in general medicine, the role of the P.A. may become increasingly important.

Preceptorship at ORNL

"We have been interested in the concept of physician's associates for some time," said Dr. Thomas A. Lincoln, director of the Health Division at ORNL. "I contacted Duke about two weeks before the beginning of the preceptor phase of the program. Wise came to ORNL to do his preceptorship. We liked him and his work so we offered him the job and he accepted," he said.

According to Lincoln, Wise will give periodic physical examinations and handle routine dispensary visits by employees. Additionally, he will be involved in the cardio-pulmonary resuscitation training program because of his special background in this area.

While working for Dr. Orgain at Duke, Wise did all of the exercise testing on the treadmill machine, except when a patient had an "exotic" or risky condition. He also did echocardiography, a process which uses ultra sound to reflect beams of sound lengths on the various tissue interfaces. The sound lengths produce a two-dimensional image of a structure, i.e., the septum or valve of the heart, and gives the physician some idea of its structure, motion and physiologic ability to perform.

Although Wise is the first P.A. to be hired in the Nuclear Division, the Corporation's Texas City Plant has employed one for a couple of years.

COMPANY Service

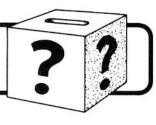
30 YEARS ORNL

Damous D. Willis, Molecular Anatomy Program; D. W. Moses, Plant and Equipment; Raymond I. Reynolds, Information; Ralph B. Guinn, Finance and Materials; William W. Proaps, Metals and Ceramics; Howard D. Harris, Operations; and Jane Gurney, Neutron Physics.

25 YEARS

William F. McCullough, Ruth C. Wood, Robert D. Scofield, Margaret T. Guthrie, Curtis W. Gullett, Lorraine S. Abbott, James P. Anglin Jr. and Fred L. Hannon.

QUESTION BOX



If you have questions on company policies, benefits, etc. or any other problems with which we might help, just let us know. Drop your inquiry to the Editor, Nuclear Division News. (Or telephone it in to your plant news representative.) You may or may not sign your name. It will not be used in the paper.

Questions are referred to the proper authorities for accurate answers. Each query is given serious consideration for publication.

Answers may be given to employees personally if they so desire.

QUESTION: In the past months, there have been nearly 100 job bids on the bulletin board for hourly employees. In our group there are 19 materials and parts men. Ten of these men bid on just about every one of these jobs .All we ever hear from them is a letter from the Personnel Office telling us we are not qualified. For instance, two of these jobs were for riggers and iron workers. Behold, two truckdrivers got these jobs. Nine of these men were never interviewed for any of the jobs we bid on. About 50% of our work is rigging work.

Janitors, laborers, truckdrivers, material handlers, cleaners, stockkeepers and materials and parts men in other departments are getting these jobs. These men are wondering if the trouble getting one of these jobs is in Personnel or in the department in which they are working. Most of us have 20 to 30 years' service.

ANSWER: During May, June and July of this year, there were 16 different job bids placed on the bulletin boards in Y-12's, for a total of 177 hourly roll positions. Each employee who bid on these openings was given careful consideration in accordance with the Company-Union contact. Examples of those things considered are seniority, related work experience, work performance, attendance, medical restrictions, etc. Not all candidates are interviewed only those senior employees whose file and work record indicate that they might meet the minimum qualifications requirements. Anyone turned down for the opening he has applied for can, if he wishes, contact the Employment Office through his supervisor to arrange for an interview to further discuss his personal qualifications.

In the filling of the recent Ironworker and Rigger vacancies, two successful candidates, a Process Operator and a Truck Driver with applicable craft experience in rigging and-or ironworking of the type required and specified in the job bid, were selected from 124 bidders. The "50% of our work" performed by the Materials and Parts Man classification and referred to in the question is not considered by itself as meeting the minimum qualifications required for the Ironworker and Rigger classification, which is subject to work assignments requiring skilled rigging techniques, structural fabrications, and steel erection.

QUESTION: In the recent wage negotiations, why was discrimination shown between the Paducah and Oak Ridge plants?

ANSWER: Against which location? Wages, as well as other conditions of employment of those employees represented by Unions, result from negotiations between the Company and the Union involved. It is difficult to make comparisons since there are so many variables. These include, but are not limited to, differences in area rates, differences in timing, and differences in the employee mix — that is, the number of employees in different job classifications.

Editor's Note: A reader, a former guard, in response to an answer concerning Company policy on removal of animals from within the plant areas which appeared in the June 20, 1974 issue of the Nuclear Division News, points out that he had observed men on their way to shoot animals and heard orders to that effect. Our previous answer stated: "Some installations use a dart gun loaded with tranquilizers for this purpose. The dazed animal is then taken to the Animal Shelter. Other installations merely call the dogcatcher and let him capture the animal. It would not be our policy to kill the animals unless very unusual circumstances made this necessary."

Further explanation might be enlightening. Some of the unusual circumstances where animals have been killed in plant areas include: where an employee had been bitten; where rabies was suspected; where experimental animals were being bothered by strays; where an animal was sick and had become a nuisance; where an animal was considered dangerous; or where an animal had become a nuisance and efforts to remove it were of no avail. We shoot dogs and cats, to which the original question referred, only as a last resort.

QUESTION: What ever happened to the Educational Assistance Program to aid employees in receiving their high school diploma? I signed a petition about two years ago showing an interest in receiving my diploma, and have heard nothing since then.

ANSWER: Any employee who is interested in taking outside courses leading to a high school diploma or an equivalent (GED) should ask his supervisor or the Training Department for detailed information and assistance in preparing an Educational Assistance Application. Additionally, some, but not all, installations provide some in-house training and the Training Department can provide information on what courses, if any, are available at your installation.



CORPORATION'S HIGHEST AWARD — The Paducah Gaseous Diffusion Plant was awarded UCC's Distinguished Safety Performance award, the corporation's highest honor for safety performance. Clyde C. Hopkins, left Plant Manager, accepts the plaque from UCC President William S. Sneath.

ORNL team honored by NASA

Last December, 21 months after its launching aboard an Atlas Agena rocket, a tiny, unmanned spacecraft named Pioneer 10 passed within 81,000 miles of Jupiter, gathering more information about this giant planet than all astronomers throughout history. And ORNL had a part in making it all happen. Last month at a special ceremony in California, ORNL, as part of an AEC team, was honored by NASA for outstanding contributions to the mission's success.

Pioneer 10 has many firsts to its credit. It was the first to explore the outer planets, the first to fly beyond Mars, the first to attempt passage through the Asteroid Belt, the first to investigate Jupiter and its moons, the first to attain such a high rate of speed (80,000 mph), and it will become the first manmade object ever to leave our solar system. OR-NL's involvement with the mission contributed greatly to another one of these firsts - the spacecraft drew its electrical power entirely from nuclear generators.

During proof-testing of what were hoped to be flight-quality generators, it was discovered that the electrical outputs were rapidly degrading and that the tantalum-alloy capsules containing the radioisotope fuel were cracking. The loss of power would mean failure of all spacecraft systems, and cracking of the capsule would lead to the release of fuel in a rocket launching accident. ORNL's Metals and Ceramics Division was called in to investigate the problem as part of its ongoing materials program for the Space Nuclear Systems Division (SNS) of the AEC.

Coupling laboratory experiments together with data obtained on the cracked capsules, Henry Inouye and Chain-Tsuan Liu, with the assistance of Richard E. Pawel and Ernest L. Long, identified the nature and extent of the embrittlement program which led to the cracking and worked out various fixes for its correction. Rodney W. Knight and Harrel E. Reesor, together with Claude M. Benge and Ralph L. Clark of the Plant and Equipment Division, constructed some of the additional generator hardware

necessary to alleviate the problem. Final verification of the fixes by examination and testing of additional generator capsules was done by Ernest L. Long, Herbert E. McCoy, and Bennie McNabb Jr. The entire effort was coordinated by Ralph Donnelly who acted as program manager.

Calendar of EVENTS

TECHNICAL October 7

Biology Division Seminar: "Bioanalytical Assays Using Membrane Filters," 1:30 p.m.; "Molecular Filtration," 3 p.m.; T. R. Ittelson and P. K. Chadwick, Millipore Filter Corporation, Bedford, Mass. Tower 1. Conference Room, Building 9207.

October 8

Biology Division Seminar: "High Purity Water in the Research Laboratory," 1:30 p.m.; "Preparation of Sterile Tissue Culture Media," 3 p.m.; T. R. Ittelson and P. K. Chadwick. Tower I Conference Room, Building 9207.

October 8-11

Southeastern Industrial Health Conference: Riverside Motor Lodge, Gatlinburg.

October 9-11

Chemistry Division Information Meeting: Oak Ridge National Laboratory.

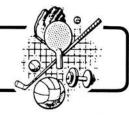
October 17-18

Health Physics Information Meeting: Oak Ridge National Laboratory.

October 15-16

East Tennessee Section of American Chemical Society Lind Lectures: Joel H. Hildebrand, University of California, Berkeley. October 15: "Is it Superstition or Knowledge?" Room 300, Buehler Hall, UT Campus, Knoxville, 8:15 p.m. October 16: "It Ain't Necessarily So - Discrepancies Between Actual Phenomena and Current Explanations." Jefferson Junior High School, Oak Ridge, 8:15 p.m.

RECREATIONOTES



CARBIDE CAMERA CLUB ANNUAL SALON

Harley Ferguson, Don Dudenbostel, Gordon Hodges, John Edwards, Ward Bandy and Joe Jernigan have been named as judges of the upcoming Carbide Camera Club Annual Salon.

Judging will be October 24 and entries must be in by October 17. The Salon provides Camera Club members with the opportunity to enter their best black and white, and color prints and color slides for competition on an annual basis. Each entrant must do all the printing and mountain of prints; slides may be commercially prepared. The Salon will be on display for the public from November 3-24 at the Oak Ridge Community Art Center.

Ferguson, who owns a commercial and industrial photographic firm in Knoxville, has gained experience in advertising assignments and is area representative for NCAA for making high speed movies.

Dudenbostel, who is employed at ORNL as a photographer, has taken assignments in commercial and advertising photography as well as having done free-lance motion and still photography. He teaches two courses in the field at the University of Tennessee.

Hodges, who owns a portrait studio in Knoxville, began his interest in photography while in the Air Force during World War II. His primary interest is perfecting the art of fine portraiture, although he has had experience in other photographic techniques.

Edwards, who is currently photographic supervisor at ORGDP, also acquired experience in his field while in the Air Force during World War II. He has done commercial, industrial and portrait photography.

Bandy, who is currently supervisor of photography at ORNL, as been active in photography, both in the art itself and in speaking engagements. He recently received the craftsman degree from the Professional Photographers of America.

Jernigan, who is owner of a commercial photographic firm in Knoxville, is well known in this area for his work. He and Ferguson recently were awarded Court of Honor awards at the Tennessee Photographers Association convention in Chattanooga.

The next meeting of the Camera Club will be Tuesday, October 8, in Cheyenne Hall at 7:30 p.m. This month's competition for members will be color slides of nature. Applications for membership and for the Salon may be obtained from Carole King, extension 3-5664.

SMALL BORE RIFLE LEAGUE

The All-Carbide Small Bore Rifle League firings got started Tuesday, October 1. They will be held on succeeding Tuesdays, October 8, 15, 22 and 29, November 5, 12, 19 and 25 and December 3.

Firings are held indoors at the Oak Ridge Sportsmen's Association range.

All employees of Union Carbide are entitled to enter the competition. Competitors will furnish their own ammo. A total of five matches must be fired to make one eligible for prizes

Additional information may be obtained from L. W. Weston, extension 3-1860, or the Recreation Department, extension 3-5833.

Gregory son named top Kentucky welder

Gregory Edwards, son of Mr. and Mrs. Palmer G. Edwards of the Plant Engineering Division, is the Future Farmers of America Welding Champ-



Gregory

ion of Kentucky
He earned this
honor by scoring
99 out of 100
points as a member of the Reidland High School
welding team.
Gregory was the
high scorer on the
team and scoredthe highest num-

ber of individual points ever in the state competition.

In September, the Reidland junior and the team will participate in the national welding competition of the FFA in Memphis.

Y-12 GOLF TOURNAMENT

Tom Smith took Y-12's final tournament of the year, scoring a low 74 on the Whittle Springs greens in mid-September. Jim Vance scored a 76, along with Jim George.

George Cozart scored handicap lows with a 79; Randy Collins carded a 76.

Joe Pryson and John Baker tied for par-honors, 11 each.

Don Branson's 78 was low in the second flight, and Ernie Collins scored an 80.

Earl Smith counted eight pars; Pete Gregory and Curt Ridings, seven.

Hez Noble's 83 was low in the third flight; followed by Mel Whited with a 90.

E. McConnell and R. L. Hopson took handicap lows with a 90 and 95.

C. B. Redding parred five holes; Jack Marquiss, four.

ORNL BOWLING

The Woodchoppers stand high in the A League, only a half a step ahead of the Gutterfinks A. and the Hal Frames teams.

C. League standings go to the Damagers, ahead of the Remkeys, thus far in season's rollings. Marvin Anderson rolled a series of 600 scratch recently, games of 248, 170 and 192!

The Strikettes struck early in the ORNL Ladies' League, ahead of the Coolettes. Mary Long's 209 was high recently, as was her 644 scratch series.

The Carbide Mixed League still belongs to the Oops team. They are closely followed by the Untouchables and the B & C's. Jesse Harris and Irene Carmack were top bowlers recently.



JOINT PICNIC — Two Oak Ridge Gaseous Diffusion Plant divisions recently staged a joint picnic at Clark Center Recreation Park. The Employee Relations and Finance, Materials and Services Divisions pooled resources to enjoy a day at the park, and dine on barbecue, cooked there on the spot! Some scenes from the affair are seen above.

Y-12 BOWLING

The Badgers barely lead C League bowlers, inches ahead of the Sunflowers and DLM Used Cars. Del Ducay put a 253 scratch game on the boards recently as did Ray Waldrop.

The Rollers grabbed an early lead in the Y-12 Mixed League, as rolling got into high gear.

The Eightballs lead the Classic League, one point ahead of the Playboys. Bill Ladd rolled a 267 recently Don Forrester a 241. Ladd's 699 scratch series put a high mark on early rollings.

ORGDP BOWLING

The Mix-Ups control a half-point lead in the Wednesday League, a step ahead of the Planners. Carroll Hensley put a 236 game on the boards recently.

The Tuesday League lead belongs to the All Stars, miles ahead of the pack. B. G. Human rolled a 225 game, 606 scratch series recently.

The Wood Bees take a two point lead in the ORGDP Women's League ahead of the Up-Towners.

ORNL GOLF TOURNAMENT

Leo Caldwell's 74 was a low card at ORNL's Wallace Hills golf tournament held recently. John Cornelius carded second low score with 78.

Handicap honors were gleaned by I. H. Wiggins and Leroy Vest, each with 79.

E. Bordes parred 12 holes, while Grady Whitman counted 11.

Flight two went to Dave Simpson and Charlie Hood, with 81, and 85 apiece.

Bob DeBakker and Desmond Levins turned in handicap lows of 85 and 88 to win that section.

Division three went to E. Cox, with 88, and to Fred Kappelmann, with a 90.

Handicap honors were picked up by Nat Morrell, 90, and C. Thomas and F. O'Donnell with 91 each.

Bill Fair turned in four pars.

THE LAST WORD

Success is relative - the more success the more relatives.



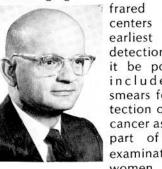
FIRE PREVENTION COMMITTEE — Oak Ridge Gaseous Diffusion Plant employees gear for Fire Prevention Week, next week, occurring every year during the week of the great Chicago fire. Seated from left are George B. Kearns, Bernard H. Thompson, James R. Hutton, John D. Hoogesteger, Donald B. Shupe, Guy V. Tucker and Paul F. Shorten. Standing are Burris N. Strunk, Larry E. Wheeler, William E. Schimmel and James H. Harris. Not pictured are Scarlett M. Osborne, Edward B. Harris and Ewart S. Robinson.

The Medicine Chest

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning their health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, or call the news editor in your plant, and give him your question on the telephone.)

By T. A. Lincoln, M.D.

QUESTION: "It is my understanding that the National Cancer Institute and the American Cancer Society are not only setting up 27 breast cancer detection centers throughout the country, but also are encouraging the establishment of in-



frared scanning centers to assure earliest possible detection. Would it be possible to include Pap smears for the detection of cervical cancer as a regular part of physical examinations for women employ-

ees? Would UCCND consider purchasing infrared scanning equipment for breast cancer detection? (Note: Question paraphrased because of its length. Ed.)

ANSWER: Pap smears are offered on a voluntary basis to female employees as a part of the periodic physical examination. Breasts are examined by palpation. Self examination is also encouraged. Two additional techniques, mammography and thermography, have been developed to help in the early detection of breast cancer. Mammography is a special X-ray examination of the breast and thermography is a photographic recording of the natural infrared (heat) emission of the skin. In cancer, tiny flecks of calcium are an early sign and can sometimes be detected by the mammogram when no lump can be felt. Increased infrared emission can often be detected in the skin over a breast cancer, but it also occurs with several benign conditions.

Both of these tests are valuable aids but neither is completely reliable. They both must be combined with a meticulous examination. An important drawback of mammography when it is used for screening is the low yield of positive results, considering the radiation exposure required. Thermography, when used alone for screening, is risky because it may be negative even though a small cancer is present. Combining a careful physical examination with thermography and selective mammography is an idea which may be possible in special centers but is not practical for most employee examination programs. The costs are high and it seems unreasonable at this time to make such a large investment in trying to detect only one cancer, especially since it is not the most serious cancer problem in working people.

QUESTION: "My wife is subject to periodic depressions which are sudsudden in onset but fortunately short-lasting. I have read that they treat chickens with hormones, and I wonder if my wife's depression could be related to hormones absorbed from the meat."

ANSWER: Di-ethyl stillbesterol is no longer allowed in chicken feed and cannot be given in any form to chickens which are to be used later for human consumption. Rapid mood fluctuations are fairly common, and during middle age they may become more severe and are more often depressions than euphorias. If the problem is severe, your family physician could arrange a referral to mental health experts who may be quite helpful. You should not approach your wife with the idea that she is mentally ill but rather that she is handicapped by these spells of depression and might be helped to feel better by consultation with a psychiatrist or psychologist.

QUESTION: "I have read that a glass of beer daily keeps older people more alert. Any comment?"

ANSWER: Beer is both a food and an intoxicant. In small quantities it relaxes, releases inhibitions, stimulates the appetite and provides mild sedation. Older people usually have a stronger effect from toxins and alcohol is no exception. If beer is substituted for a nutritious diet because it tastes good and requires no preparation, it can become a hazard to health. The sedative effect, which in a few cases may be beneficial, can lead to confusion and unsteadiness, resulting in injuries. If obesity is already a problem, beer, with its 170 calories per 12 ounce can, will aggravate it. Most elderly people would be wise to keep consumption of beer at an extremely modest level or give it up altogether. When used with discretion, it may help relax and stimulate the appetite, but it does not make a person more alert. It is a sedative, not a stimulant.

THE LAST WORD

Excerpt from a wedding announcement: The groom has been married previously on two occasions. He has also been through World War II.



BOYS AT PLAY — Busy young people are happy people, and happy people stay out of trouble, say Nuclear Division employees active in Boy's Club functions around the various neighborhoods.

'Boy's Club simply would not exist without the United Way'

"Our purpose is that the Boy's Club be a place where any kind of boy and every kind of boy can go, and where support and concern for each boy as an individual exists. It's a place where boys are working together and playing together with a purpose. We try to teach and encourage participation and sportsmanship - we have a rule in our athletic programs at the Boy's Club that all the boys play; if a boy comes out to practice, he plays in the game."

Jim Carter of the Health Physics Division at Oak Ridge National Laboratory and the current vicepresident of the Boy's Club board of directors has been working with the Boy's Club since he came to Oak Ridge in 1960 as a volunteer football, basketball, and baseball coach and official and a member of the Board. "But I'm no different from hundreds of parents who have volunteered to help out in so many ways," Carter says. "What the Boy's Club has now is due to community support - volunteer work, contributions, moral support, sponsoring businesses - Oak Ridgers have really supported this organization and should be proud of

Vets return to coach

In the beginning, Boy's Club programs were limited to sports. "But not all boys are interested in sports," Carter says, "and over the years we have wanted to expand our programs to include boys of a wide range of ages and interests. That became possible in 1970 with the major step to improve the facility. We now have a library, active programs in music and arts and crafts, and a variety of other classes and activities. We have a lot to offer boys with all kinds of interests."

"What is needed is simply someone being interested in the boys as individuals. There are 1100 boys who are members, and so often the older boys who have grown up in the Boy's Club will come back to coach and provide leadership - I think that says something about the impact the Club has had on their life."

Football classic

The boys take bus trips to Knoxville, Atlanta, or any place in the area that provides a reason for a special trip - a ball game, the zoo, a dairy, a bakery. The boys take their sleeping bags and stay in the Boy's Club in the community they visit or stay with families in the community.

The annual Boy's Club Football Classic to be held October 12 this year, is the only fund-raising event the Club sponsors that brings in a significant amount of money. "The boys themselves sell the tickets," Carter says, "and we explain to them that it's their chance to help the Boy's Club - and you ought to see them! The boys sell from door-to-door and absolutely cover the town!"

"It's the United Way, though, that provides money for all our operating costs - about 75 percent of our total budget. The Oak Ridge Boy's Club simply would not exist as it does today without the United Way. Anyone who came down to actually see what the organization does would contribute. I think the United Way is an excellent way for people to help other people."



Y-12 PLANT

CAR POOL members from Cherokee Ridge area, Clinton Highway, to any portal, straight day. Fred Clark, plant phone 3-5101, home phone Knoxville 947-1967.

ORNL

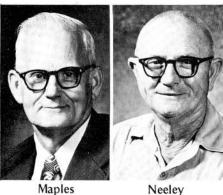
FORM TWO-PERSON CAR POOL from Louisiana Avenue, Robertsville Road area to South Portal, 8 a.m. shift. Bill Martin, home phone 483-1164, plant phone 3-6331.

RIDE from Hunter Circle, Hillside Drive area to East Portal, 8 or 8:15 a.m. shift. Janie Cohill, plant phone 3-6520.

TWO CAR POOL members from Cherokee, Bailey Road section, Kingston, to any portal, straight day. T.A. Hickman, plant phone 3-5762, home phone Kingston 376-7648.







Six employees at Oak Ridge National Laboratory retired September 1.

The Plant and Equipment Division lost three employees who had combined company service of more than 75 years.

James T. Maples, an electrician, chose early retirement. He came to work at ORNL in 1959. He is married to the former Mamie Weaver, and they live at Route 6, Peterson Road, in Concord. They have two sons.

Daniel C. Neeley had worked as a leadburner helper in Plant and Equipment since 1946. He resides at Route 4, Hamilton Drive, Lenoir City. He and his wife, the former Willie Mae Robertson, have one son.



Robinson

Slover

John A. Robinson was a shops foreman. He had worked at ORNL since July, 1943. Robinson and his wife, the former Eula Morris, have two sons and a daughter. They reside at 110 Victoria Road, Oak Ridge.

Lonnie A. Slover took normal retirement from the Physics Division where he was a science technologist. He is married to the former Ruby Mae Sparks. They have two sons both of whom are airline pilots. The Slover home is at 11138 Sonia Drive, Concord.



Steven D. Upton took early retirement from the Operations Division, He had worked at ORNL for almost 30 years. He and his wife, Frankie Lee, have four daughters and a son. His granddaughter, Sharon, is employed at the Y-12 Plant. The Upton home is at Route 3, Sweetwater.

Rubin C. Wallace retired as a fire protection inspector in the Laboratory Protection Division. He and his wife, Ila, have one daughter, four grandchildren and three great-grandchildren. They live at 2305 Adair Avenue, Knoxville, Wallace had worked at ORNL for over 31 years.



Abbatiello

Hines

Two Oak Ridge Gaseous Diffusion Plant employees will retire at the end of this month, and one retired at the end of September.

Anthony A. Abbatiello, a technical specialist in the Separation Systems Division, is a 31-year veteran. He retires to his 116 Delmar Circle, Oak Ridge, home.

Clyde A. Hines will also retire at the end of this month after almost 29 years of company service. An electrical mechanic, he lives at 139 Northwestern Avenue, Oak Ridge, and hopes to spend more time on his hobby of photography.

Richard M. Morris, an air plant operator in utilities, lives at 2120 Adair Avenue, Knoxville. He has been with UCC more than 30 years, and retired at the end of September.





Malcolm P. Crews, a foreman in the Maintenance Division, retired from the Y-12 Plant August 31. A 30year veteran, he lives at Route 2, Oliver Springs.

Waymon F. Frasier retired from the Plant and Equipment Division at OR-NL on October 1. Frasier, a power equipment operator, had worked at ORNL since 1950.

Frasier and his wife, Georgie, live at 827 Rogers Street, Clinton. They have three children and three grand-

FORMER ORGDP MAN

Rex A. Jenkins, who left the Oak Ridge Gaseous Diffusion Plant last October, died September 6 at his Route 3, Oliver Springs home. He was a maintenance mechanic for 29 years. He is survived by his wife and five daughters. Funeral services were held at the Frost Bottom Baptist Church, with burial in the church cemetery.

Carpenter, Chamblee, Croley take new ORGDP assignments

Three new job assignments are noted in promotions at the Oak Ridge Gaseous Diffusion Plant. Von Herbert Carpenter has been named a supervisory trainee in the Operations Division, and Walter L. Chamblee has been made a maintenance foreman in Fabrication and Maintenance. James R. Croley Jr. has been named a senior buyer in the Purchasing Division.

Carpenter, a native of Pyatte, N. C., has been at ORGDP 30 years. He attended Crossnore Business College and is a graduate of the Industrial Electronics Course.

Mrs. Carpenter is the former Iva Lee Deerman, and they have two children, Terry and Connie. They live at 306 Della Street, Clinton.

Chamblee was born in Jeraldine, Ala., and worked with Rust Engineering and the Tennessee Valley Authority before joining UCC in

He and his wife, the former Patsy Sue Beene, live at Petros, with their son, Eric.

Croley is a native of Harlan County, Ky. He attended Lincoln Memorial University, and worked in Instrumentation and Controls at the Oak Ridge National Laboratory before transferring to Purchasing in

He lives at 125 Villanova Road. Oak Ridge.

AIPE NAMES OFFICERS

The Knox Area Chapter of the American Institute of Plant Engineers has announced its officers for the 1974-75 year. They are: president, John F. Miller, Jr., Rohm and Haas Tennessee Inc.; vice president, John R. Creek, Union Carbide Film Coatings, Loudon; secretary, Harry E. Seagren, Plant and Equipment Division, ORNL; and treasurer, John L. Reagan, Oak Ridge facilities engineer, ORGDP.



Carpenter

Chamblee



Croley

KHYM AUTHORS BOOK

Joseph X. Khym, ORNL's Biology Division, has written a book entitled Analytical Ion-Exchange Procedures in Chemistry and Biology. The book, published by Prentice-Hall, Inc., is the latest member of the Biological Technique Series. Alexander Hollaender, former director of the Biology Division, is scientific editor of the

The purpose of the books in this series is to present short treatises or monographs concerned with certain specialities in biological and-or chemical research. The books are intended for the advanced student or practicing scientific investigator who is not well acquainted with such specialities, but would like to acquire a certain amount of expertise in them.

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